DOCUMENT RESUME

ED 355 567 CS 508 095

AUTHOR Lanigan, Richard L.
TITLE Capta versus Data: Method and Evidence in Communicology.
PUB DATE 3 Feb 93
NOTE 32p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adults; *Communication (Thought Transfer); *Discourse Analysis; Elementary Education; *Ethnography; Foreign Countries; Language Research; Phenomenology; *Research Methodology
IDENTIFIERS *Communication Context; USSR (Kirgizia); USSR (Uzbekistan)

ABSTRACT

Arguing that all language is communication, but very little communication is language, this paper explores questions of method and evidence in the human science practice of communicology. The first part of the paper analyzes the dialectical question of methodology in which method as procedure is implicated with thought (logos) as judgment per se, i.e., a system outside the observer. The paper then examines the issue of what is manifest in appearance, that is, the dialectic relation of what is thought (data) and what is lived (capta) as the experience of consciousness. To illustrate the analysis, the paper uses a classic research report in the history of cognitive development, namely, A. R. Luria's ethnographic (not ethnomethodological) use of evidence from discourse practice gathered in a 1931-1932 study in Uzbekistan and Kirghizia in the Soviet Union. The paper also uses another ethnographic instrument, namely, a picture puzzle widely distributed in the United States to parents for purposes of assessing their children's cognitive development through linguistic meaning. A figure representing the comparative research procedure involving the order of experience and the order of analysis, and a figure of the "Giggles 'n Games" exemplar are included. (Contains 19 references.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED355567

Capta Versus Data: Method and Evidence in Communicology

Richard L. Lanigan

Dept. of Speech Communication
Southern Illinois University
Southern Illinois University
Carbondale, IL 62901-6605
Tel: (618) 453-2291
Fax: (618) 453-2812

© 1993, R. L. Lanigan; COPYRIGHT NOTICE:
The author retains all rights of original ownership
including the right to reprint and republish this
essay without prior or written consent of the current
publisher after original publication by the current publisher.

An Article Prepared For A Special Issue of
Human Studies: A Journal for Philosophy and the Social Sciences
entitled "Phenomenology in Communication Research"
Edited by Lenore Langsdorf
with an Introduction and Bibliography by the Editor
(to appear as Volume 16, Number 4; October 1993)

CS508095

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Richard L. Lanigan
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Third Draft Date: 3 February 1993
Computer word count: 9,226

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

Communicology is the study of human discourse in all its forms, ranging from the phenomenology of human gesture and speech to such semiotic mediations as art, film, and television, and now the faddish cellular telephone. This modern conjunction of the human intension (phenomenology) and human extension (semiotics) as a problematic of embodiment and discourse (communicology) begins with Edmund Husserl, the acknowledged founder of phenomenology. Husserl is the first scholar to suggest the central research importance of focusing our critical thought on the human comportment and cultural behavior that we call *communication*. As he says in his 1922 London lectures on "Phenomenological Method and Phenomenological Philosophy," his purpose is to give a series of lectures that explicate "a transcendental sociological phenomenology having reference to a manifest multiplicity of conscious subjects communicating with one another" (Kaelin and Schrag,1989: 425). Nor should we forget that Karl Bühler's monumental *Sprachtheorie* [*Theory of Language: The Representational Function of Language*] published in 1934 begins with Husserl's purpose fully in mind.

> The new model of human language, which would have to be consistently laid out in keeping with the concessions made in the *Cartesian Meditations,* is quite as rich as that needed by the theory of language and practically applied by it since Plato; it is the *organon model* of language. We shall begin our presentation of the principles of the science of language with it. (Bühler, 1934/1990: 13; see Lanigan, 1988: 223-245)

As Merleau-Ponty (1964: 86; my corrected translation and emphasis) summarizes the problematic of Husserl and the thematic of Bühler, "As soon as we distinguish, alongside of the objective science of *language,* a phenomenology of *speech,* we set in motion a dialectic through which the two disciplines enter into communication." It is just this dialectic that I propose to explore as a question of method and evidence in the human science practice of communicology. In the first part of my analysis, I shall be

looking at the question of method, more precisely, the dialectical question of *methodology* in which method as procedure is implicated with thought (logos) as *judgment* per se, i.e., a "system outside the observer" (Wilden, 1987: 315). As a second topic of concern, I propose to examine the issue of what is manifest in appearance, that is, the dialectic relation of what is thought (data) and what is lived (capta) as the experience of consciousness: *evidence*, i.e., the "observer in the system" (Wilden, 1987: 315). To illustrate the analysis, I shall be using what is considered a classic research report in the history of cognitive development, namely, A. R. Luria's (1974: 48-99) ethnographic (not ethnomethodological) use of evidence from discourse practice in which formal education and social change are an assumed influence on the human ability at "abstraction and generalization." This evidence was originally gathered in a 1931-32 study in Uzbekistan and Kirghizia in the Soviet Union (USSR). As a cross-cultural referent, I shall also make use of another ethnographic "instrument," namely a picture puzzle widely distributed in the USA to parents for purposes of accessing their children's cognitive development through linguistic meaning. In short, I shall be arguing for the thesis that "all language is communication, but very little communication is language" where "language is not the problem in our understanding of reality, the problem is discourse [*Rede*]" (Wilden, 1987: 132, 137). It is also important to note initially that the dialectic of method and evidence relies on another dialectic between communication theory and information theory where dialectic is "a transformation of organization" (Wilden, 1987: 274). In particular, we shall be concerned with the transformations of language and communication as logics of phenomena: Phenomenology.

The Rule of Method

Beside its historical importance as an ethnographic study, Luria's (1974) book *Cognitive Development: Its Cultural and Social Foundations* continues to receive focused attention within the discipline of communicology. In particular, selections from it are reprinted in the widely used textbook edited by John Corner and Jeremy

Hawthorn, *Communication Studies: An Introductory Reader* (1989) that has gone through three editions between 1980 and 1989.[1] One selection in the textbook is Chapter 7 "Education, Generalization, and Abstraction" (1989: 57-58; reprint of Luria, 1974: 58-60). This is the text that I shall be using also. While it will require an extended quotation, it does have the advantage of letting the reader see the original "evidence" in its entirety and as methodologically constrained by Luria's interpretation. I am also interested in the fact that the lived experience of the reader in dealing with the narrative discourse allows the reader to simultaneously see *both* the researcher's point of view *and* the appositional (not oppositional) perspective of the respondent. Apposition in discourse occurs where "a second term explains a first term" in the same utterance or dialogue (Lanigan, 1992: 231; Wilden, 1987: 234). For example, in the sentence "The bag was a purse," we understand the first term "bag" is unmarked (has no gendered meaning) *until* we hear the second marked term "purse" which is culturally gendered "female" by Americans (USA). Thus, the apposition of the terms causes the term "bag" to become marked as different in discourse meaning (even though its linguistic character has not changed). A more familiar example of this culturally negative apposition is the phrase "bag lady." But, before we view the topic of evidence, it will be helpful to examine the appositional perspectives as a methodological issue. Part of the crippling legacy of rationalism and positivism in the "scientific method" of modernity is the failure to distinguish the semiotic nature of human research practice as between communication and language.

Like most other human practices, research is largely a symbolic activity in which "evidence" is mediated by converting experience ("observation") into consciousness ("measurement") and calling it "humanistic" or "naturalistic." Postmodernity has come to favor this methodology and names the evidence thus produced as *capta* (*quod erat inveniendum;* which was to be found out). Capta is that which is *taken* as evidence; it is the methodology of *discovery* (Lanigan, 1992: 215). In this context, we may fairly define postmodernity as a concern with the discovery of

symbolic reference as experience takes up consciousness ("understanding" in the epistemological sense). The research advantage with discovery is that a *qualitative judgment* allows for accuracy and abstraction in description (depiction). The logic of phenomenology at work here functions as the test of accuracy in research judgment. This is to say, we consider the quality of the example being used as a definition (i.e., an exemplar) for including phenomena in a *typology* (our consciousness of the phenomenon) of similar experiences or what is usually referred to as an intension class of objects (Alexander, 1988: 88). As Paul Ricoeur (1977: 146; see Lanigan 1993) summarizes, "phenomenology says that we may intuitively understand the essence of the phenomenon in question on the basis of one well-chosen example." Luria's (1974) book is a fine example of this methodology, although its conclusions are skewed from the start by contaminating assumptions, before the fact, about "correct outcomes."

Or on the converse side of methodology, the symbology of research practice can be "evidence" that is mediated by converting consciousness ("measurement") into experience ("observation") and calling it "scientific" or "realistic". Modernity has championed this second methodology and designated the evidence so produced as *data* (*quod erat demonstrandum;* which was to be demonstrated). Data is that which is *given* as evidence; it is the methodology of *invention* (Lanigan, 1992: 215). In such a context, modernity can be defined functionally as a concern with the invention of symbolic reference as consciousness gives in to experience ("knowledge" in the epistemological sense). The comparative research advantage with invention is that a *quantitative judgment* allows for precision and generalization in ascription (prediction). A recently popular example of this methodology is Hawking's (1988) best seller, *A Brief History of Time: From the Big Bang to Black Holes.*

For our immediate purposes, we need to distinguish between these postmodern and modern methodologies by comparing what I call the phenomenologist's paradigm (postmodern) and the positivist's paradigm (modern). The difference is basically one

of order when a researcher proceeds to mediate consciousness and experience (Figure 1). In the practice of research, this means distinguishing between the order of experience (OE) and the order of analysis (OA), i.e., the encounter with evidence (OE) as it appears to consciousness versus the method (OA) of experiencing the evidence. In both orders of judgment, it is a matter of combining the experiencer (researcher) with the activity of experiencing (researching) the phenomenon being experienced (what is researched). Since the phenomenologist is looking at the *logic* inherent in the *phenomenon*, s/he uses a *method* that starts (OE) with her/himself as the (1) experiencer who (2) experiences the (3) event or thing experienced. S/he does not pretend not to be in the situation (so-called "objectivity") or to be omnipotent (so-called "authority"). Rather, the phenomenologist begins with human experience, her/his experience as a rule of judgment. That rule simply records the contextual facts of the situation, namely that the 1-2-3 order was experiencer/ experiencing/ experienced. Since there is a 1-2-3 logic in this phenomenon, the experience ("observation") came into consciousness that way ("measurement"). In order to analyze and report on the phenomenon (OA), the order must be reversed into the 3-2-1 sequence of the experienced/ experiencing/ experiencer, i.e., how the experience is taken (capta), how a person describes.

In other words, the phenomenologist is moving (OE) from her/his experience ("observation") to discover a phenomenon in consciousness ("measurement") and then back as a judgment using the very discovered logic of the phenomenon in which the researcher's *conscious of* the phenomenon (OA) is a measure of the observation (experience). Only by starting with the OE and reversing it as the OA can the researcher be guaranteed of both accuracy and abstraction in description (depiction). The obvious example of this process is the educational phenomenon we call *learning* in which the order of experience (what the teacher says; message encoding) is reversed into the order of analysis (what the student hears; message decoding) so that speech is learned (remember, in this example we are privy only to the phenomenon of

how the teacher and student are using speech [learning a logic or code] and not what they are talking about!). Accuracy and abstraction are directly depicted by the quality of description that both the teacher and the student make. In the learning situation, we expect the student's response to be redundant in relationship (communication), not the mere repetition of words (language). This is an important point to recall when we come to compare the answers of Luria's respondents with the answers Luria assumes to be correct.

Figure 1 about here

The positivist paradigm, by comparison, assumes that the order of experience (OE) and the order of analysis (OA) are parallel orders of judgment. Since all experiencers are assumed to be objectively the same (ironically, a very subjective assumption), all forms of consciousness ("measurement") will have the same experience ("observation"). Therefore in any research judgment, the order of analysis will always follow the same order of experience: experiencer/ experiencing/ experienced. The researcher is simply researching what is researched, but we have mysteriously put aside the question of how! The positivist paradigm hypostatizes its logic of method; the logic is what the experiencer/researcher brings to the phenomenon. The logic is given (data) to the phenomenon in order to predict whether or not the ascription will hold. In the example of Luria's work, we shall see this point of view exemplified in the researcher who judges certain answers to be wrong because they do not correspond to his expectation for correctness (i.e., using certain words). The pervasive "reality" of this problematical point of view in contemporary science is nicely illustrated in Hawking (1988). In the context of discourse (Lanigan, 1977, 1988, 1992) and media studies (Sobchack, 1992), there are parallel critiques of positivism in its continuing practice by contemporary "social science."

There is one last point to make with regard to phenomenological methodology.

All phenomenologists use a set of analytic techniques to do their research and these procedures fall into three broad categories: (1) Existential considerations of capta and data; (2) Semiotic considerations of capta and data; and (3) Hermeneutic considerations of capta and data (Spiegelberg, 1982: 678-719). In my own work, I follow a syncretic version of the Spiegelberg model used by Maurice Merleau-Ponty in which the three broad categories of capta/data consideration are systemically applied (Lanigan, 1991). I propose to use this same methodology for my analysis of Luria's work. The method consists of the progressive, yet synergistic use of (1) phenomenological description with a focus on the phenomenon as a sign-system (discourse), (2) phenomenological reduction with a focus on the signifiers (meaning expression; revelatory phrase) in the sign-system, and (3) phenomenological interpretation with a focus on the signifieds (meaning perception; speakability) in the sign-system (Lanigan 1988, 1992). As Ricoeur (1977: 147; my emphasis) summarizes the methodology: "What the phenomenologist calls the 'essence of experience,' therefore, is what we might call the *speakability* of this experience, the fact that it is open to language and that some expression may be more appropriate than others to say what it means."

We are now in a position to apply these methodological assumptions to a discursive example. Such an application will give us certain useful insights about the nature of evidence as it is used in the discourse of science such that we may contrast a human science understanding with that of an assumptive knowledge in positive science.

The Rule of Evidence

Evidence constitutes the dialectic relation of what is thought (data) and lived (capta) as the consciousness of experience. Before we can explore the many dimensions of this dialectic, it is helpful to have an example in mind to which we can continually refer. As already mentioned, the example I propose to use is from Luria's (1976) *Cognitive Development*. In this research evidence, Luria is attempting to

demonstrate the discursive difference between (1) "concrete situational thinking" (p. 54) or a "graphic thinking process" that is "based on an individual's practical experience" (p. 52) in *communication* and (2) "conceptual or categorical thinking" which is "the shared experience of society conveyed through its linguistic system" as the "principal tool for abstraction and generalization" in *language* (p. 52). The extended quotation from Luria (1976: 58-60) follows and reproduces the text exactly as printed with bold face (researcher *in situ*) and italics (researcher analytic comment). Respondent's ("subjects") comments are shown in quotation marks.

Subject: Sher., age sixty, illiterate peasant from the village of Yardan. The task is explained through the example, *shirt-boots-skullcap-mouse,* and subject shown pictures of the following: *hammer-saw-log-hatchet.*

"They all fit here! The saw has to saw the log, the hammer has to hammer it, and the hatchet has to chop it. And if you want to chop the log up really good, you need the hammer. You can't take any of these things away. There isn't any you don't need!"

Replaces abstract classification with situational thinking.

But in the first example I showed you that the mouse didn't fit in.

"The mouse didn't fit in! But here all things are very much alike [ukhshaidi]. The saw saws the log, and the hatchet chops it, you just have to hit harder with the hammer."

But one fellow told me the log didn't belong here.

"Why'd he say that? If we say the log isn't like the other things and put it off to one side, we'd be making a mistake. All these things are needed for the log."

Considers idea of utility more important than similarity.

But that other fellow said that the saw, hammer, and hatchet are all alike in some way, while the log isn't.

"So what if they're not alike? They all work together and chop the log. Here everything works right, here everything's just fine."

Look, you can use one word--tools--for these three but not for the log.

"What sense does it make to use one word for them all if they're not going to work together?"

Rejects use of generalizing term.

What word could you use for these things?

"The words people use: saw, hammer, hatchet. You can't use one word for them all!"

Could you call them tools?

"Yes, you could, except a log isn't a tool. Still, the way we look at it, the log has to be here. Otherwise, what good are the others?"

Employs predominantly situational thinking again.

The examples cited indicate that we had no luck getting these subjects to perform the abstract act of classification. Even when they grasped some similarity among various objects, they attached no particular importance to the fact. As a rule, they operated on the basis of "practical utility," grouping objects in practical schemes rather than categorizing them. When we referred to a generic term they could use to designate a distinct group of objects, they generally disregarded the information or considered it immaterial. Instead, they adhered to the idea that objects should be grouped in practical arrangements. They continued to do so even when we presented objects that, in our view, would be difficult to group together for some genuinely practical scheme. When we clarified the principle of abstract classification, they listened attentively enough to our explanation but failed to take it into account. The following examples illustrate this tendency.

Subject: Abdy-Gap., age sixty-two, illiterate peasant from remote village. After the task is explained, he is given the series: *knife-saw-wheel-hammer*.

"They're all needed here. Every one of these things. The saw to chop firewood, the others for other jobs."

Evaluates objects in terms of "necessity" instead of classifying them.

No, three of these things belong in one group. You can use one word for them that you can't for the other one.

"Maybe it's the hammer? But it's also needed. You can drive nails in with it."

The principle of classification is explained: three of the objects are "tools."

"But you can sharpen things with a wheel. If it's a wheel from an *araba* [kind of bullock cart], why'd they put it here?"

Subject's ability to learn the principle of classification is tested through another series: *bayonet-rifle-sword-knife*.

"There's nothing you can leave out here! The bayonet is part of the gun. A man's got to wear the dagger on his left side and the rifle on the other."

Again employs idea of necessity to group objects.

The principle of classification is explained: three of the objects can be used to cut but the rifle cannot.

"It'll shoot from a distance, but up close it can also cut."

He is given the series *finger-mouth-ear-eye* and told that three objects are found on the head, the fourth on the body.

"You say the finger isn't needed here. But if a fellow is missing an ear, he can't hear. All these are needed, they all fit in. If a man's missing a finger, he can't do a thing, not even move a bed."

Applies same principle as in preceding response.

Principle is explained once again.

"No, that's not true, you can't do it that way. You have to keep all these things together."

One could scarcely find a more clear-cut example to prove that for some people abstract classification is a wholly alien procedure. Even when we explained the principle of classification very thoroughly, the subjects persisted in their own approach. (Luria, 1976: 58-60)

This Luria text example allows us to see the symbolic process in which thinking is represented in words as well as pictures. In the attempt to explain the process of cognitive classification, the researchers make use of both linguistic and pictorial examples. It is not necessary to show that this type of linguistic classification is still in contemporary use by positive social science as can be found in any "standardized test" currently in use, the "verbal" section of the Graduate Record Examination (GRE) for instance.

However, a more subtle "testing" process occurs in the grade schools as a learning device. It is so pervasive that "entertainment" forms of the "instrument" are readily available to parents who are encouraged to "diagnose" their child's cognitive level. The example I shall be discussing later is pictorial in nature, although there are purely linguistic versions as well. Note that Luria uses pictorial and linguistic protocols interchangeably, although it amounts to code-switching. In such intersemiotic transformations, one sign-system is a criterion for the other. Thus, the primacy of the image either visually as a picture (or photograph) or orally/aurally as speech *prior to* language as a symbol (secondary mediation; Wilden, 1987) has recently been argued with success by Barry King (1992).

First Exemplar: Sher

Let us now turn to the analysis of Luria's respondents and their discourse. We shall begin with Sher, the sixty year old illiterate peasant from Yardan.

Phenomenological Description: Recall that Sher was *given (data)* the following example sign-system by the researcher: shirt- boots- skullcap- mouse. Then Sher was *given (data)* the sign-system: hammer- saw- log- hatchet. While Sher was content to accept the fact that the mouse is "the odd one out" (the signifier name used in theThird Exemplar, which I shall also use), he does not agree to the log as the odd one out. Indeed, he is adamant in his judgment (discursive rhetoric) of a communication context ("even one in") that the log belongs in the sign-system, "They all fit here!" Being illiterate, Sher is not influenced by the logic inherent in the semantics, syntactics, or pragmatics of *writing* as a sign-system (language grammatology), therefore the researcher's description is that Sher "replaces abstract classification with situational thinking." By using the bracketing technique we can temporarily set aside the researcher's description (OA) as not belonging to the respondent's experience (OE). Bracketing [époche] means to temporarily leave out of consideration a *part of experience,* because the part is not experienced [OE] in fact, rather it is a part of analysis [OA] applied externally to the actual experience (a frame of analysis; the map is not the territory). Thus, bracketing means isolating the assumption so that it does not work inappropriately as a criterion for the initial judgment of experience and is thus not given as a speculative assumption to account for the conditions of appearance.

Phenomenological Reduction: Sher's experience is one of discourse as an oral phenomenon (speech) and this experience (rather than the example item offered initially by the researcher) is *taken (capta)* existentially as defining *his* experience, the signifier of the phenomenon. Sher's sign-system moves from *parole* (speaking) to *langue* (language). This is to say according to Roman Jakobson, (1) the linguistic utterance is the logical exemplar or linguistic norm for all other speech acts in the same category, (2) individual language use precedes social usage, (3) individual

speech is centrifugal [applies to other experiential situations] before language is centripetal [applies to parallel non-experiential situations] (Lanigan, 1988: 59). If you reread the Luria quotation, you will find that all respondents continually and consistently refer to what the speaker says (revelatory phrase) as a definitional depiction (signifier); even the researchers make use of the discourse sign-system (e.g., "but that other fellow said . . ."). We are led to wonder if the research interviews did not in fact teach the researchers the primacy of the oral form in discourse over the written form in language!

Phenomenological Interpretation: In Sher's case, the researchers conclude that he "rejects use of generalizing term" and "employs predominantly situational thinking." These interpretive conclusions assume that the order of experience (OE) and analysis (OA) must be the same and that Sher fails to recognize similarity. This is the fallacy of positivist procedure. When we start with Sher's description (sign-system) and move to his reduction of the evidence as capta (signifier), we can readily see what he has selected as the phenomenon of meaning (signified). Recall what the researcher says in frustration: **Look, you can use one word --tools-- for these three but not for the log.** Sher responds: "What sense does it make to use one word for them all if they're not going to work together?" Rather than rejecting the *generalizing* term given by their (the researcher's) language experience, Sher has insisted on an *abstraction* (classification) *taken (capta)* from his discourse experience. The revelatory phrase (signifier) here is "work together" which is the existential, semiotic, and hermeneutic rule of judgment constituting Sher's *conscious experience of discourse.*

First Exemplar: Communication Theory

We can now elaborate on Sher's comportment in the context of communication theory. Sher relies on his existential condition of understanding when confronted with the Luria test (a semiotic condition) which is a new experience to be engaged and dealt with (a hermeneutic condition). As all of us do, Sher has to decide (1) whether

to accept the *information theory* of the researcher's explanation of the task where the *context of choice* for choosing is *given (data)* or (2) whether to accept the *communication theory* of his own explication of the task where he *takes (capta)* his own *choice of context* for choosing what is meaningful. Like most of us in situations where we are confronted with a *new* experience, Sher chooses communication theory. The typology of this conscious experience is easily confirmed by simply recalling our very first confusion in dealing with a semantic differential scale test or the experience of trying to explain it for the first time to a child (this will be our Third Exemplar below).

Because Sher chooses to go with communication theory, his methodology is *eidetic*. An eidetic approach recognizes that the judgments we make will function as a *realization model* of research procedure in which our procedures must conform to either (1) an *analytic* approach based in the logic of deduction or (2) a *critical* approach based in the logic of adduction (Lanigan, 1992: 207). Simply put, Sher chooses the *analytic* model (what Luria calls "abstraction") to solve his meaning problems. Sher uses good old fashioned deduction to solve his problem where deduction, following C. S. Peirce, is: Rule + Case = Result (Lanigan, 1992: 216). Sher uses his own lived-experience (Rule) in seeing the hammer- saw- log- hatchet (Case in question) all "work together" (the meaningful Result). Sher has, indeed, abstracted from his experience and performed the task of "classification." As Alexander (1988: 107) comments, "The abstract, then, is not something that floats mysteriously into our thoughts we know not from whence. Rather, it is something tied to experience."

As the *other* person involved in the research project, Luria (1976) relies on the second eidetic model of explication as a basis for interpretation and *takes (capta)* Sher to be using a *critical* perspective that Luria calls "concrete situational thinking" (p. 54) or a "graphic thinking process" that is "based on an individual's practical experience" (p. 52). As Peirce defines it, the critical approach uses the logic of

adduction: Rule + Result = Case [universal and a priori] (Lanigan, 1992: 217). This is to say, Luria sees Sher using his own lived-experiences (Rule; "concrete") all "work together" (the meaningful Result; "situational") in explaining the hammer- saw- log-hatchet (Case in question; "thinking").

As is always the case in phenomenological research, we immediately intuit that the description, reduction, and interpretation that we just concluded yield (synergistic motivation) a research result, another new and interesting description of Sher and Luria at their cognitive work. We again engage the phenomenological research procedure: (1) Phenomenological Description: Both Sher and Luria begin their approach to the problem by using an eidetic model of problem solving: communication theory combines phenomena using a both/and logic of inclusion to create typologies (intensional classes). That is, Sher chooses the context of analysis: "Deduction: In the *same* context [Rule] two phenomena [Case] are *internally* compared [Result]; the analysis requires *sufficiency* as a standard of judgment" (Lanigan, 1992: 216). On the other hand, Luria chooses the critical context: "Adduction: In *different* contexts [Rule], an *external* comparison [Result] establishes the identity of two phenomena [Case]; the criticism require *necessity* as a standard of judgment" (Lanigan, 1992: 217).

(2) Phenomenological Reduction: Both Sher and Luria are on the same continuum of thinking that runs from the "abstract" (Sher) to the "situational" (Luria). The whole process is one that goes from simple abstracting to imaginative altering of abstractions. According to Alexander (1988: 108), "It is a process of (1) focusing attention upon some feature within experience; (2) holding this feature as the object of our immediate thought, and (3) possibly remembering it later."

(3) Phenomenological Interpretation: Within their respective, but separate, perspectives on the phenomenon both Sher and Luria are using a logical classification that is essentially eidetic, i.e., a consciousness of experience defined as a "choice of context" or *realization* (what can be thought by a person; language) as opposed to

actualization (what can be lived by a person; communication). The capta is in the discourse. Referring to the hammer- saw- log- hatchet item, Luria asks: **Could you call them tools?** Sher answers: "Yes, you could, except a log isn't a tool. Still, the way we look at it, the log has to be here. Otherwise, what good are the others?" Thus, Sher refuses to collapse his deduction, that tools "work together" on the log, into Luria's adduction that Sher "rejects [the] use of [a] generalizing term" by insisting (as a good researcher would) that his, Sher's, observation of the log be accounted for! This is to say that for Sher "the name of a thing is a word" in communication, while for Luria "the name of a person or thing is a noun" in language (Wilden,1987: 169).

First Exemplar: Information Theory

Given the general assumption of a positivist orientation in Luria's analysis, it will be helpful at this point to elaborate that perspective as a contextual contrast to our discussion thus far of phenomenology as a human science methodology. In short, it is a matter of contrasting communication theory as an eidetic procedure (realization model) with information theory as an empirical procedure (actualization model). Recall that we have bracketed out any consideration that one theory is better than the other, or, that there is only one correct theory. Rather, we are getting at an essential description by accounting for any perspective used from among the logical possibilities as suggested by the phenomenon per se. In the Sher exemplar, we are accounting for the fact that communication theory always entails information theory (Wilden, 1987; Lanigan, 1988, 1992). In brief, we have to deal with the theoretical fact that in human discourse and meaning constitution as an *empirical* phenomenon, analysis (deduction) frequently develops from an *experiment (induction logic)* and criticism (adduction) just as often develops from an *experiential method (abduction logic).*

In Luria's (1976: 52) book, an experiment is being performed on discourse to test for "conceptual or categorical thinking" which is "the shared experience of society conveyed through its linguistic system" as the "principal tool for abstraction

and generalization." Strictly speaking (Lanigan, 1992: 217), an experiment uses an *inductive* logic: Rule + Result = Case. This is to say, "with two phenomena [Case], an *internal* comparison [Result] establishes the same context [Rule]; the experimentation requires *actuality* as a standard of judgment." As an example of this induction, recall Luria's instruction to Sher: "The task is explained through the example, shirt- boots- skullcap- mouse, and subject shown pictures of the following: hammer- saw- log- hatchet." Sher refuses the induction which would establish Luria's hypostatized language result, namely that a culturally correct answer is "the shared experience of society conveyed through its linguistic system." For Sher, experimental thinking by induction is *not* the "principal tool for abstraction and generalization." Luria tries the other empirical procedure as an alternative strategy; he tries the *experiential method.* The experiential approach uses the abduction logic: Rule + Result = Case (particular; a posteriori). Such an abduction is defined by the fact that "in the *same* context [Rule], an *internal* comparison [Result] establishes the identity of two phenomena [Case]; the experience requires *possibility* as a standard of judgment" (Lanigan, 1992: 218). In the particular learning (a posteriori) experience of the test, Sher refuses the abduction offered by Luria. Luria states: **But in the first example** [shirt- boots- skullcap- mouse] **I showed you that the mouse didn't fit in.** Sher answers: "The mouse didn't fit in! But here all the things are very much alike [*ukhshaidi*]. The saw saws the log, and the hatchet chops it, you just have to hit harder with the hammer." For Sher, the essential character of possibility does not exist as between the two different protocols as discourse phenomena. In short, the choice of a context (information theory) is refused by Sher in either its inductive or abductive form. Sher refuses to accept, as empirical, the discourse which Luria offers that hypostatizes a cultural practice. Rather, Sher insists on an eidetic model derived from his past consciousness which is his lived-experienced as a cultural norm. Luria suggests that Sher is not an isolated example, rather he represents a typicality of comportment in communication. This we see confirmed in the protocol of

Abdy-Gap.

Second Exemplar: Abdy-Gap

Recall that Abdy-Gap is sixty-two years old and also an illiterate peasant. His communication behavior is almost identical to that of Sher.

Phenomenological Description: Abdy-Gap is *given (data)* the following example sign-system by the researcher: knife- saw- wheel- hammer. Under the hypostatization of positivism, the "wheel" is "the odd one out." But not for Abdy-Gap: "But you can sharpen things with a wheel. If it's a wheel from an *araba* [kind of bullock cart], why'd they put it here?" Luria trys a second time with the test item: *bayonet- rifle- sword- knife.* The assumed odd one out is the rifle; even for a positivist, this one is a little harder since all the items (across many cultural dimensions) are tools for killing.

Phenomenological Reduction: Abdy-Gap, like Sher, is using a pure deduction to analyze his experience where "in the *same* context [Rule] two phenomena [Case] are *internally* compared [Result]; the analysis requires *sufficiency* as a standard of judgment" (Lanigan, 1992: 216). Abdy-Gap searches his semantic lexicon of discursive memory for sufficient condition uses of a wheel and comes up with two: (1) a sharpening wheel to use on the knife, saw, and hammer, or (2) a cart wheel that has nothing to do with "sharpening" [signifier; revelatory phrase]. The Rule for sharpening used to compare the two cases of the wheel, grind stone versus wagon wheel, demonstrates that the wagon wheel has no sufficient use with the knife, saw, and hammer. Abdy-Gap does no better in Luria's estimation when the second protocol item is used to explain "abstract classification." Luria notes: "The principle of classification is explained: three of the objects can be used to cut but the rifle cannot."

Abdy-Gap's critical response is instructive: "It'll [rifle] shoot from a distance, but up close it can also cut." We do not know if Abdy-Gap was a soldier or possibly the victim of hand-to-hand combat, but he does know that a rifle butt will cut your

face and crack your skull, that is, if the bayonet/sword/knife attached to it does not stab you to death first! Recall the adductive rule for critical method: "in *different* contexts [Rule], an *external* comparison [Result] establishes the identity of two phenomena [Case; universal and a priori]; the criticism requires *necessity* as a standard of judgment" (Lanigan, 1992: 217). According to the discourse exemplar then, ""It'll [rifle] shoot from a distance, but up close it can also cut" establishes a Rule of different contexts (both distant and up close) with an external comparison of Results (both shoot and cut) that establishes the essential identity of the phenomena (cutting).

Phenomenological Interpretation: Remember Luria's conclusion about Abdy-Gap's failure to learn from a comparison of the two protocols: "One could scarcely find a more clear-cut example to prove that for some people abstract classification is a wholly alien procedure. Even when we explained the principle of classification very thoroughly, the subjects persisted in their own approach" (Luria, 1976: 60). Unfortunately, Luria fails to perceive that the deduction adopted by Abdy-Gap is simply an alternative to the induction Luria wants him to use. As a consequence, when Luria moves to the second protocol he fails to see that he is forcing Abdy-Gap to reduce his universal, a priori thinking (adduction) to a particular, a posteriori style of thinking (abduction). This is to say, "in the *same* context [Rule], an *internal* comparison [Result] establishes the identity of two phenomena [Case]; the experience requires *possibility* as a standard of judgment" (Lanigan, 1992: 218). For Abdy-Gap, (1) the Rule is that *both* "knife- saw- wheel- hammer" *and* "bayonet- rifle- sword- knife" as discourse protocols name his conscious experience of things held together by "concrete situational thinking;" (2) the Result is an internal comparison where *both* "sharpening" *and* "cutting" mean an *activity* (human embodied practice; habitus); and (3) the Case is the realization (Abdy-Gap's insight!) that *both* consciousness (*meaning* expressed in the protocols) *and* experience (*language* perceived as sharpening and cutting) are identical. Thus and probably to

Luria's frustration, the order of experience (OE) in language (*researcher* protocols as an experience) names the order of analysis (OA) in meaning (*respondent* protocols as consciousness). Again Luria's final conclusion after dealing with Abdy-Gap: "One could scarcely find a more clear-cut example to prove that for some people abstract classification is a wholly alien procedure" (Luria, 1976: 60). Indeed we have a clear-cut example, yet Luria's explanation of it is an assumption of the worst kind--one that ignores the logic of the phenomenon that is ready-to-hand in the experience of the test per se. Both Sher and Abdy-Gap are not only good at abstraction, they are good at shifting *logics* when the discourse situation is shifted by the researchers. Recall Alexander's (1988: 108) definition of the activity of abstraction: "It is a process of (1) focusing attention upon some feature within experience; (2) holding this feature as the object of our immediate thought, and (3) possibly remembering it later." Both Sher and Abdy-Gap did just this 1-2-3 (OE) and 3-2-1 (OA)! While Luria wants to find "conceptual" or "categorical" thinking that "is the shared experience of society conveyed through its linguistic system," he must concede that "discourse implies first the participation of the subject in his language through his *speech, as an individual.* Using the anonymous structure of *la langue,* the subject forms and transforms himself in the discourse he communicates to the other. . . . Without being aware of it, the subject thus makes his mark on *la langue*" (Kristeva, 1989: 11). As Wilden (1987: 161) summarizes: "In communication and behavior, however, mediation does have an orientation: a code mediates its messengers and their messages, but messengers and messages cannot ordinarily change levels so as to mediate their code." Let us now test our own conscious experience of discourse (i.e., the thesis of typicality as a research confirmation of accuracy) by looking at what we propose to teach children in America (USA) about language and communication.

Third Exemplar: Giggles 'N Games

The educational phenomenon called "Giggles 'N Games" is part of a series of one page paper and pencil "instruments" designed for use by parents monitoring

language use as a measure of cognitive development in children "ages 10 - 11- 12 plus." The one page example from the series that I am using consists of word games in various expression and perception *forms* including (1) words with letters "mixed up" that have to be unscrambled into proper order (e.g., "norc-no-het-boc" becomes "corn on the cob;" no protocol explanation is given for the semiotic presence/absence problem of the dash symbols!), (2) a block of random letters consisting of nineteen columns and twenty-one rows in which you "find" and circle whole words on the horizontal, vertical, or diagonal planes, and (3) the picture puzzle that is reproduced as Figure 2. The instrument designers have created a situation quite like the two protocol sequences that Luria used on Abdy-Gap. This is to say, the one page example has two word game *puzzles* and one word game *answer* on the front page. When you turn the page over, you get the two word game answers from the front, plus the word puzzle that was answered on the front. So, the child is confronted with an overall phenomenological paradox about where to begin: (1) front or back page [logical paradox]; (2) puzzle or answer [moral paradox]; (3) letters making words or words divided into letters [coherence paradox], and (4) meaning as pictured or inscribed [semiotic paradox].

I took the exemplar from a free packet made available in the waiting room of our local doctor's office. The author, publisher, or any other source of authority or responsibility for the publication is neither given on the individual game pages nor on the packet. The "instrument's" existence in the doctor's office constitutes an argument for objectivity based in a cultural context of authority (which form of omnipotence we do not know). We presume the authority to be culture as (1) recorded in language which classifies the *forms of perception* and (2) "formal education" which legitimizes the *forms of expression* --just as Luria hypostatizes it in his work! All this to say, the positive notion of culture versus nature is a presumption that the phenomenologists wants to bracket.

Figure 2 about here

Phenomenological Description: In the first row of Figure 2, we have an illustration of what Luria called the "graphic thinking processes." That is, four objects are pictured: light bulb- flashlight- candle and holder- table lamp (all showing rays of emanating light). We are to assume they are all sources of light with one deviant form. The "odd one out" is the "candle and holder," so indicated on the answer page by an "X" drawn through the image (here, we must bracket out our knowledge of Derrida's technique of "erasure"). In row two, we find four more objects in line drawings: untied sport shoe- "baseball" hat- T-shirt- bag [or "purse"?]. The odd one out is the "bag" (so crossed-out on the answer page). We are to presume that they are all types of clothing, again with one deviant form. I use the normative word "deviant" since this is a standard sociological concept of experience in sociology that is ideologically pervasive in American (USA) culture and is embodied in the test protocol. In row three, we see pictures of the following: partially iced cake- apple with leaves and stem- slice of pie- iced doughnut. The odd one out is the "apple" (again, confirmed by a crossed-out image).

Phenomenological Reduction: We do perceive certain reality problems in our conscious experience of these images, namely their presumed information theory status: the context of choice is given. In row one, we are *not* supposed to be concerned with such counter-factual conditions as (1) a lighted bulb not in a socket, (2) a flashlight held horizontal without a human hand to do it, (3) a candle flame with no wick to support it, (4) a table lamp with no table to support it in mid-space. Next in row two, we are meant to see (1) a shoe without worrying about whether it goes on the right or left foot, or if it even needs a human foot; yet, it is a shoe gendered stereotypically male by its "sport" classification and cavalier use as "untied," (2) a "baseball" hat without a head that might not gender it as male apparel, (3) a T-shirt

without a gendering body in it, and (4) a bag which, 1by its comparative size and design, suggests it is a "purse," thereby gendering it female. Finally in row three, we are intended to perceive that (1) an iced cake is self complete as it sits suspended in mid-air and supported only by a paper doily and dish, (2) a fresh apple hanging from an imaginary tree, (3) a slice of pie baked by a cook who does not know where to put the steam vents, which is no problem since the pie seems to have no identifiable filling, and (4) an iced donut also floating in space, apparently a cake donut according to its depicted density.

Had the artist or researcher used a communication theory perspective, all the suggestions of missing context in Figure 2 just discussed would be supplied in the drawings. This new contextual evidence would not change the structure of the protocol, but it would specify the normative cultural nature of the evidence in an explicit manner related to human experience as practiced in the everyday world. In short, the phenomenological reduction suggests to us that certain specific phenomena are being used to define the so-called "correct" answer to the puzzles. Returning to row one, the respondent is supposed to select the "candle and holder" as the odd one out, because it does *not* use *electricity* as the energy source for light, and because of a contrasting array of oppositional human practices, e.g., turning a switch as opposed to striking a match. Reviewing the objects in row two, the respondent should select the "purse" as a deviant image since the other items of clothing are supposed to be male. A strict gender rule is being taught as a matter of cultural ideology. In the third row of images, the fresh "apple" is the odd one out because the cake, pie, and donut are all baked "goods" that are culturally more desirable that a piece of fruit. Another ideological preference for unhealthy nutrition is being taught in the doctor's office!

Phenomenological Interpretation: If we accept the ideological implications of the three rows of images offered to us in Figure 2, then we are forced by the "context of choice" rule in information theory to reach certain interpretive positivistic conclusions as *given (data).* This is to say, images in row one require that we form a

single identity of intensional characteristics among the (1) light bulb (2) flashlight, and (3) table lamp, all showing rays of emanating light, namely, the characteristic of "electric light". The deviant "candle and holder" produces light by combustion and is thus a "chemical light."

The pictures in row two demand that we form another intensional essence among (1) untied sport shoe, (2) "baseball" hat, and (3) T-shirt based on the gender assumption that boys wear these clothes thereby specifying the characteristic of "male gender." The deviant "bag " is gendered "female clothing," a category itself implicated as deviant since a purse is inappropriately worn (a "bag" is not clothing). Here, we need to bracket out the semantic implication of the deviant terms like "bag lady."

As we recall, the group of images in row three of Figure 2 is (1) a partially iced cake, (2) slice of pie, and (3) an iced doughnut which share the intensional characteristic of being pastries that are "baked." The deviant "apple with leaves and stem" is a natural, not cultural, artifact and is therefore to be excluded, even though it appears to have been picked by someone.

On the other hand, when we interrogate the ideological implications of the three rows of images offered to us in Figure 2, we are assisted by the "choice of context" rule in communication theory to reach certain interpretive phenomenological conclusions as *taken (capta).* Beginning with row one, we immediately intuit the use of a negative definition since our "given" or assigned task rule is one of *exclusion and digital opposition.* Michel Foucault has shown how pervasive this form of cultural control and social dominance is as a cognitive practice in discourse (Lanigan, 1992: 142-154). If we use some imaginative free variation to consider the use of *inclusion and combinatory apposition* as a rule of puzzle solving, then we uncover the assumption of the test protocol. Instead of the "odd one out," we might *take (capta)* the "even ones in." We may in fact conclude along with contemporary physics that we cannot experientially conclude what light (electricity)

is, but we may describe its essence with such terms as "incandescence" which differentiates between electrical and chemical light because they are *included* in the experience of heat which is itself included in even more essential forces (Hawking, 1988: 156). Hence, the "candle and holder" are essential to light, not by generalization, but by abstraction grounded in conscious experience of a combinatory typology! As a matter of fact, Foucault has called this phenomenological fact the "law of communication," namely, that you must have the combinatory context in mind *before* you can even hope to make choices that exclude characteristics from the very group of characteristics that make up the essential typology (Lanigan, 1992: 145). In a word, you must understand "light" in *all* its intensional forms of apposition before you throw away the candle in opposition (in its extensional form)!

The same sorts of interpretation can be made about the pictured items in row two of Figure 2. You must understand the meaning of the abstraction "gender" before you can select among appositional images and decide that some are male while others are female. But first, you have to understand that apparel or clothing is essentially a human artifact that is *not* bound by the characteristic of gender. It may be bound by species characteristics as between humans and animals, but even that suggestion speculates beyond the immediate capta of the third exemplar. In row three, a similar interpretation is appropriate. Before we can exclude the fresh "apple," we must recognize that it, along with the cake, pie, and doughnut, are combined as essentially an *edible* phenomenon, before we can get into such cultural classifications as "fresh" or "baked" as is demonstrated by Lévi-Strauss (1969) in his *The Raw and The Cooked.*

By way of concluding my illustration of phenomenological methodology and its conditions for the use of evidence, let me contend that Luria's (1976: 49) investigation into "generalization and abstraction" is correct where he suggests as an opening hypothesis that "the ability to move freely, to shift from one category to another, is one of the chief characteristics of 'abstract thinking' or the 'categorical

behavior' essential to it." What the three exemplars have shown is that there is at least one more essential characteristic. It is the *motivated* (not causal) ability to shift from one *logic* to another as a *code* called *discourse* which is the semiotic essence of communication among humans. The primary "choice of context" characteristic of communication theory that entails the secondary "context of choice" characteristic of information theory is an essential description (depiction) of conscious experience as *discourse* per se that marks our meaning comportment as uniquely human in the sense in which both Edmund Husserl and Karl Bühler intended for the human science of communicology (Wilden, 1987: 301-321; Roman Jakobson in Lanigan, 1992: 236). Perhaps, Paul Ricoeur (1977: 158) provides the best research summary of the human science of phenomenology as communicology: "The concern for the destiny of communication . . . is already at work in the epistemological stand for which things in general and social entities in particular are nothing else than the meanings they have for a subject and a community of subjects." Or in Anthony Wilden's (1987: 124) version of the thesis: "The mediation of communication by particular others, by the Other or by Others, and by otherness in general is essential to our humanity."

NOTE

1. It is not certain that the fourth edition will contain the Luria selections. As a reviewer for the newest edition, I have urged that they be retained for their pedagogical usefulness in critiquing positivism (1992, personal correspondence with the publisher). While the selections are an excellent illustration of ethnographic field evidence, the theoretical conclusions are questionable in ways the present article demonstrates.

REFERENCES

Alexander, Hubert G. (1988). *The Language and Logic of Philosophy.* Lanham, NY: University Press of America.

Bühler, Karl (1934/1990). *Theory of Language: The Representational Function of Language.* (Foundations of Semiotics, Vol. 25). Trans. Donald F. Goodwin. Philadelphia: John Benjamins Publishing Co.

Corner, John, and Hawthorn, Jeremy (Eds.), (1989). *Communication Studies: An Introductory Reader.* 3rd ed. London and New York: Edward Arnold Publishers.

Hawking, Stephen (1988). *A Brief History of Time: From the Big Bang to Black Holes.* New York: Bantam Books.

Kaelin, E. F., and Schrag, C. O. (Eds.), (1989). *American Phenomenology: Origins and Developments.* (Analecta Husserliana, Vol. 26). Boston: Kluwer Academic Publishers.

King, Barry (1992). Semiotic Determinism and the Photographic Sign: Towards a Theory of Textual Determinism After Post-Structuralism. Paper presented at the meeting of the Commission on Semiotics and Communication, Speech Communication Association, Chicago, Illinois, USA.

Kristeva, Julia (1989). *Language, The Unknown: An Initiation into Linguistics.* Trans. A. M. Menke. New York: Columbia University Press.

Lanigan, Richard L. (1977). *Speech Act Phenomenology.* The Hague and Boston: Martinus Nijhoff Publishers.

_____. (1988). *Phenomenology of Communication: Merleau-Ponty's Thematics in Communicology and Semiology.* Pittsburgh: Duquesne University Press.

_____. (1991). *Speaking and Semiology: Maurice Merleau-Ponty's Phenomenological Theory of Existential Communication.* 2nd ed. (Approaches to Semiotics, Vol. 22). Berlin and New York: Mouton de Gruyter.

_____. (1992). *The Human Science of Communicology: A Phenomenology of Discourse in Foucault and Merleau-Ponty.* Pittsburgh: Duquesne University Press.

_____. (1993, in press). A Good Rhetoric Is Possible: Ricoeur's Philosophy of Language as a Phenomenology of Discourse in the Human Sciences. In Lewis E. Hahn (Ed.), *Paul Ricoeur.* (The Library of Living Philosophers). Peru, IL: The Open Court Publishing Co.

Lévi-Strauss, Claude (1969). *The Raw and the Cooked: Introduction to a Science of Mythology: Vol. I.* Trans. J. and D. Weightman. New York: Harper Torchbooks; Harper and Row Publishers.

Luria, A. R. (1976). *Cognitive Development: Its Cultural and Social Foundations.* Trans. M. Lopez-Morillas and L. Solotaroff. Cambridge: Harvard University Press.

Merleau-Ponty, Maurice (1964). *Signs.* Trans. R. C. McCleary. Evanston: Northwestern University Press.

Ricoeur, Paul (1977). Phenomenology and the Social Sciences. *The Annals of Phenomenological Sociology* 2: 145-159.

Sobchack, Vivian (1992). *The Address of the Eye: A Phenomenology of Film Experience.* Princeton, NJ: Princeton University Press.

Spiegelberg, Herbert (1982). *The Phenomenological Movement: A Historical*

Introduction. (Phaenomenologica, Vol. 5/6). 3rd revised and enlarged ed. with the collaboration of Karl Schuhmann. The Hague and Boston: Martinus Nijhoff Publishers.

Wilden, Anthony (1987). *The Rules Are No Game: The Strategy of Communication*. London and New York: Routledge & Kegan Paul.

Phenomenologist's Paradigm

[experience = that which is *taken* in analysis: *Capta*]

OE ---------->
[experiencer > experiencing > experienced]

<---------- OA
[experiencer < experiencing < experienced]

Positivist's Paradigm

[experience = that which is *given* prior to analysis: *Data*]

OE ---------->
[experiencer > experiencing > experienced]

OA ---------->
[experiencer > experiencing > experienced]

Figure 1. Comparative Research Procedure Involving the Order of Experience (OE) and the Order of Analysis (OA) from Lanigan, 1992: 20.

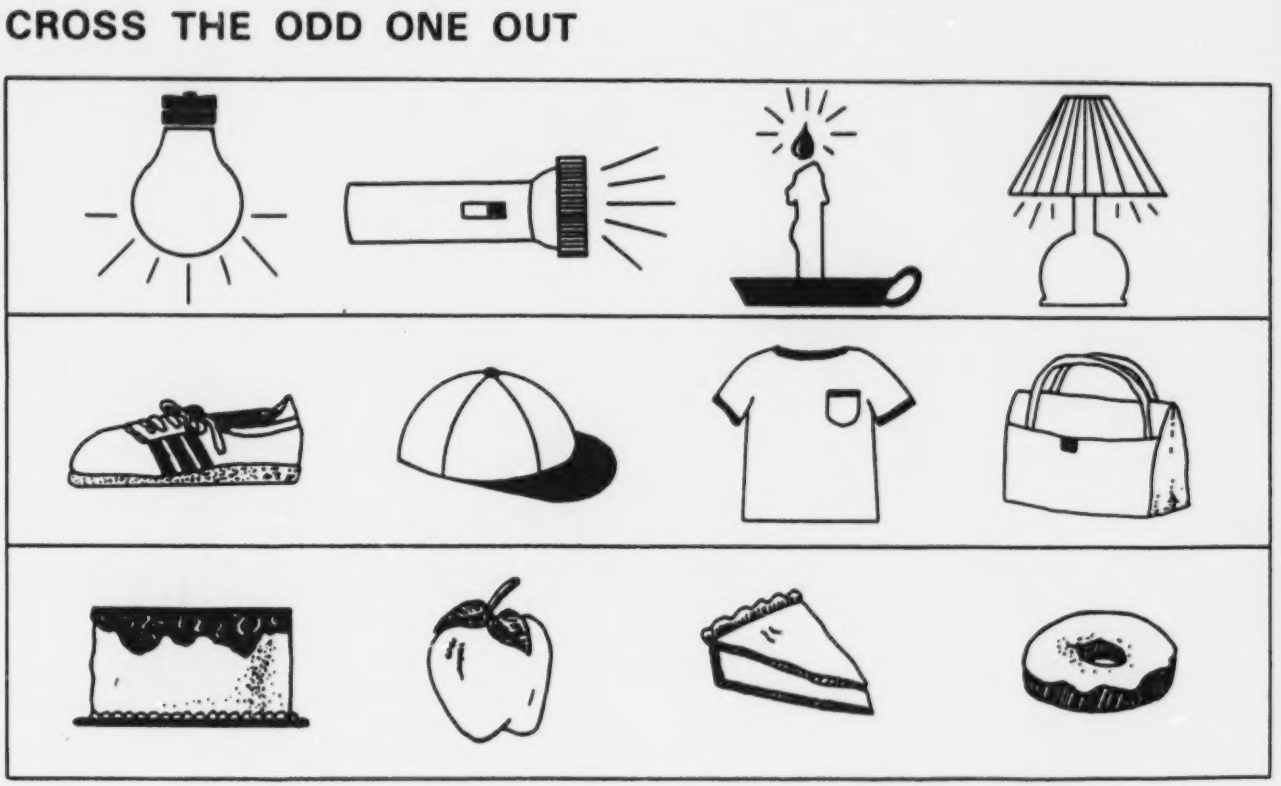

Figure 2. The "Giggles 'N Games" Exemplar.